

Serving the Marshall Space Flight Center Community

Nov. 25, 2004



Celebrating Native-American Heritage Month

Kevin McElyea, right foreground, leads Leah Long, left, during a twostep dance during the Team Redstone Native-American Powwow Nov. 19-20 at the military parade grounds on Redstone Arsenal. The event was a highlight of Native-American Heritage Month, which is celebrated each November. For more Powwow photos, see page 4.

Mining Lunar Data bolsters space exploration efforts

By Tracy McMahan

Did you help design the lunar rover? Do you remember the first rocket firings here at the Marshall Center? Are you a materials engineer who helped define requirements for the Saturn V? Do you have a stash of historical NASA documents from the Saturn/Apollo era that you would like to move out of the garage but don't want to throw away?

If you answered yes to those questions, then the researchers in the Marshall Center's Materials and Processes Environmental Effects Branch want to talk to you. As part of an effort to mine lunar data, a living database is being created through interviews with experts who communicate technical lessons learned.

These interviews, which are archived on video and audiotapes that can be passed down to future generations, are part of the Lunar Data Mining effort sponsored by NASA's Space Environments and Effects Program in the Marshall Space Transportation Programs and Projects Office and the

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Munafo takes new position at Marshall

By Lynnette Madison

ASA's Dr. Paul Munafo has been named to the newly created position of assistant director for safety and engineering at the Marshall Center.

Munafo will consolidate engineering analyses by implementing an independent, internal organization oversight of the Marshall Center's engineering systems and operations. In this role, he will be the Marshall focal point for NASA's independent technical authority.

Munafo most recently was temporarily



Munafo

assigned as deputy director of the Engineering and Safety Center at NASA's Langley Research Center in Hampton, Va.

The Engineering and Safety Center provides an independent and comprehensive examination of all NASA programs and

projects.

During the Columbia accident investigation, Munafo led NASA's External Tank Contingency Team — formed Feb.1, 2003, the day of Columbia's loss — to investigate what role the External Tank may have played in the accident. He is credited with providing valuable information to the investigation board.

Munafo's work on the External Tank Contingency Team — along with his efforts to identify and resolve a problem that threatened to ground the Space Shuttle for three months in 2002 — earned him recognition from the American

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Front row, from left, James Teed, SAIC; William A. Jacobs, UP30; George T. Story, TD51; Philip J. Tygielski, TD62. Back row, from left, David M. Anderson, NP01; Sandra S. Holland, TD01; astronaut Alan Poindexter; Betty J. Haley, TD07; and Edward F. Johnson, TD71.



Poindexter, second from right, presents Silver Snoopy awards to Howard K. Stentson, TBE/FD33; Sheri Bedwell, Mainthia FD24; and Donna M. Prsha, FD22.



Poindexter and Silver Snoopy winners are all smiles. From left, Raymond W. Shaughnessy, FD04; Frankie R. Jernigan, FD36; Poindexter, and Sandra J. Blalock, FD42.

Silver Snoopy honorees at Marshall Center

A lan Poindexter, a pilot on STS-120 and lead support astronaut at Kennedy Space Center, poses with Marshall team members after surprising them with Silver Snoopy awards in October. Members earned the award for their professional dedication to the U.S. space program.

Data-

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Materials and Processes Laboratory in the Engineering Directorate. The goal of Lunar Data Mining is to identify useful information and make it easily accessible.

"There's so much to be learned from the Saturn/Apollo era – the rationale for certain materials selection, the trade studies to reduce weight, and especially the in-the-field experiences that were never written down," explains Miria Finckenor, a materials engineer in the Materials and Processes Environmental Effects Branch who is overseeing the effort. "This program captures those lessons learned and makes older publications available, so we're not reinventing the wheel."

A key part of the Lunar Data Mining effort is a comprehensive literature review

and compilation of information sources. Finckenor and other subject matter experts at Marshall and other NASA field centers are accessing the literature's value and gleaning "nuggets" of information that can be shared with their colleagues to bolster the success of the Vision for Space Exploration.

The Lunar Data Mining effort also has support from the historians working at the Marshall Center. "The Marshall history office is glad to support this type of effort. It is imperative that the Marshall Center gather as much technical documentation as possible to support the Vision for Space Exploration," said Mike Wright, Marshall Center historian.

The final product for the first phase of the Lunar Data Mining effort will be a DVD database accessible to approved NASA and aerospace professionals. It will include hundreds of electronic documents, bibliographies, interviews and Web links — all indexed and organized by categories and cross-referenced. It will provide managers, engineers and scientists easy access to technical information that will assist them in further development of spacecraft systems for lunar missions and beyond. The database entries will help identify what materials and testing will be required to support various Vision products, as well as technology gaps that need to be addressed.

If you would like to be interviewed as part of this project or if you would like to serve as a Subject Matter Expert, please contact Finckenor at 256-544-9244 or at miria.finckenor@nasa.gov.

The writer is the technology historian for Qualis Corp.

Alabama/Mississippi AlAA pick up section awards

The American Institute of Aeronautics and Astronautics (AIAA) has announced the 2003/2004 Section Award winners.

The Section Awards honor particularly notable efforts made by a section of the Institute working as a unit. All awards are given annually in five section member categories based on member size. The Alabama/Mississippi section falls in the "very large" category. A cash award and certificate is presented to each of the winning sections. The award period is from June 1, 2003 to May 31, 2004.

The first-place winners will be honored at the awards luncheon of the 43rd AIAA Aerospace Sciences Meeting and Exhibit, on Jan. 11 at the Reno Hilton, in Reno, Nev.

Here are the awards the Alabama/Mississippi section won.

Outstanding Section Award is presented to sections judged on their overall activities and contributions throughout the year. The basis for this award is the Section Annual Report.

First Place, Alabama/Mississippi, Steven R. Noneman, section chair, Marshall Center

The **Career Enhancement Award** is presented for section activities that are beneficial to career development, such as: time management workshops, career transition workshops, career benefits workshops (health care reform, financial planning,

pension portability), technical vs. management career path workshops, resume writing, etc.)

Third Place, Alabama/Mississippi, Henry L. Pugh, career enhancement officer, Boeing Co.

The **Communications Award** is presented to sections that have developed and implemented an outstanding communication outreach program during the section year. Winning criteria includes the following: level of difficulty and complexity as well as timeliness, multiple methods of communications, frequency, format and content of the communication outreach.

First Place, Alabama/Mississippi, G. Alan Lowrey, newsletter editor, Lockheed Martin Corp.

The **Membership Award** is presented for increasing the sections' membership by planning and implementing effective new member recruitment and retention campaigns.

Second Place, Alabama/Mississippi, Ann F. Whitaker, membership chair, Marshall Center

The **Public Policy Award** is presented to sections for stimulating public awareness of the needs and benefits of aerospace research and development, particularly on the part of government representatives, and for educating its members in the value of public policy activities.

Second Place, Alabama/Mississippi, Carl M. Case, public policy officer, retired.

Munafo-

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Institute of Aeronautics and Astronautics. He was named 2004 Engineer of the Year by the Institute.

A Marshall employee since 1975, Munafo is a three-time recipient of the NASA Exceptional Achievement Medal and has been recognized with NASA's Outstanding Leadership Medal, as well as numerous other NASA awards and commendations.

A native of Boston, he graduated from Boston Technical High School in 1957. After earning a bachelor's degree in mechanical engineering from the Massachusetts Institute of Technology in Cambridge, Mass., in 1962, Munafo received a master's degree in mechanical engineering from Tulane University in New Orleans in 1971. In 1996, he earned a doctorate degree in materials science from Auburn University in Auburn, Ala.

The writer, an ASRI employee, supports the Public Affairs Office.



Szymczak

Obituary

Donald M. Szymczak, 53, of Huntsville, died Nov. 3. He joined the Marshall Center in 1989 and worked as an engineer in the Configuration and Data Management Group of the Engineering Directorate.

Mr. Szymczak provided direct support to many programs and projects during his career, including the International Space Station, Chandra X-Ray Telescope and the Orbital Maneuvering Vehicle.

Survivors include his wife, Susan M. Szymczak of Huntsville; his mother, Bette Bouwkamp; his stepson, Neil Siconolfi; his stepdaughter, Sandy Hayes; his sisters, Susie Bowman, Sally Bolthouse, and Mary Durkee; and his broth-

ers; Gene Szymczak, Dave Szymczak, Tom Szymczak, Richard Szymczak; and Pat Szymczak.

'Star' Gazing

From the Marshall History and Archives Files

Forty years ago this week, Nov. 25, 1964, the *Marshall Star* reprinted the text of a short speech given by Marshall Director Dr. Wernher von Braun before the American College of Surgeons in Chicago. The following is an excerpt from that speech:

"Right now, the environment of space

has a certain amount of mystery, even an air of magic, connected with it. This is caused largely by its unknown elements. We have always been afraid of the unknown. We need to dispel the air of mystery, take the 'hex' out of space. And the only way we can do this is to get better acquainted with it, live in it, and work in it, for extended periods."

Team Redstone Powwow celebrates Native Americans

The Marshall Center teamed with the Redstone Arsenal community to celebrate Native-American Heritage Month with several events in November. The celebration culminated Nov. 19 with a Powwow at the military parade grounds. There were activities for children and adults. Winners were announced in the essay contest and for the displays that best showcased the contributions of Native Americans. The Marshall Center won third place for its display; no Marshall team members placed in the essay contest.



Drummers beat the host drum during a tribal dance.



Ginger Firehawk finger weaves in her booth at the Powwow.



Lawrence Lee, the lead wind dancer, performs during an intertribal dance.



On right, Shawn Longfeather stands with his medical service dog, Shadow Hunter, a Japanese Akita. The dog assists Longfeather when he suffers a seizure.

Announcements

Tree lighting, Holiday Reception set at the Marshall Center

The Marshall Center's annual tree lighting ceremony will be at 4:45 p.m. Dec. 6 in front of Bldg. 4200.

The Holiday Reception will be from 1 to 3 p.m. Dec. 9 in the Center Activities Bldg. 4316. This year's theme is "Holiday Magic in the Snow."

The reception will feature music, food and door prizes. To be eligible for door prizes, team members must make donations of non-perishable food items for the North Alabama Food Bank. Team members must also be present to win. Transportation will be provided.

For more information, call Angela Storey at 544-0632 or Andrea Nunn at 544-8965.

AARP safety course set

The Marshall Center and the American Association of Retired Persons are sponsoring a safety course for drivers over age 50 on Dec. 13 and 14. The course, limited to 30 people, will be held in Bldg. 4200, Room G13E. See "Inside Marshall" for registration.

Management Operations Office retirees to meet Dec. 16

The next Management Operations Office retirees meeting will be at 10 a.m., Dec. 16 at the Cracker Barrel Restaurant in Madison. For more information, call Linda Zielinski at 544-1498.

Hazardous and Controlled Waste training is Dec. 1

A mandatory Hazardous and Controlled Waste Generator training is scheduled for 9-11 a.m. Dec. 1 in Morris Auditorium, Bldg. 4200. The annual training is for all personnel associated with hazardous or controlled waste accumulation. Personnel should register via the Safety, Health and Environmental Web site.

Alabama Update with Gov. Bob Riley is Dec. 8 at VBC North Hall

The Madison County Chamber of Commerce will present the 2004 Alabama Update with Alabama Gov. Bob Riley at noon, Dec. 8 in the Von Braun Center North Hall. Tickets are \$27 and may be purchased from Rosa Kilpatrick of the Government and Community Relations Office through Dec. 3.

MARS Ballroom Dance Club Christmas dance is Dec. 4

The Marshall MARS Ballroom Dance Club will hold its annual Christmas Dinner Dance on Dec. 4 at the Von Braun Center East Hall. The semi-formal event begins with a social at 6:30 p.m. and dinner at 7 p.m. Dance from 8 - 11 p.m. to the music of The Little Big Band. Tickets are \$20 for MARS Dance Club members and \$25 for all others. Call Pat Sage at 544-5427 for more information or see "Inside Marshall."

IEEE Gold Meeting is Dec. 8

An IEEE Gold Meeting will be from 5:30 - 7 p.m., Dec. 8 at the University of Alabama in Huntsville Engineering Building, Conference Room 258. John Maxwell of The Boeing Company will speak on "Power Systems for Modern Spacecraft." Food and beverages will be provided. Contact Courtney Spivey at 464-4878 if you plan to attend.

International Computer Security Day is Nov. 30

Stop by the lobby of Bldg. 4200 to view the International Computer Security Day display. For more information on IT security, go to http://cio.msfc.nasa.gov/its.html.

Mayor Loretta Spencer is Marshall Association speaker

Huntsville Mayor Loretta Spencer will speak at the next Marshall Association luncheon at 11:30 a.m., Dec. 2 at the Redstone Officers' and Civilians' Club. She will discuss Huntsville's future and the Marshall Center. Contact Roslin Hicks at 544-7795 by Nov. 29 for reservations.

Marshall's pre-retirement planning seminar is set

The annual Marshall Center pre-retirement planning seminar will be Dec. 7-9, beginning at 8:30 a.m. On Dec. 7 and 9, the seminar will be held in the Morris Auditorium, Bldg. 4200. On Dec. 8, it will be in Bldg. 4200, Room 329. Marshall employees and their spouses are welcome to attend. Registration is not required, but employees should notify their supervisor and administrative officer before attending. For agenda, see "Inside Marshall."



Photo by Emmett Given, Marshall Center

Picture this

Lamont Terry, a mathematics coach at Madrid Middle School in El Monte, Calif. takes a photo of the H-1 engines on the Saturn 1 first stage in the Marshall Center's east test area. Terry was a participant in the NASA Network of Explorer Astronaut Teachers workshop in October.

Classified Ads

Miscellaneous

Baby bed with mattress, \$70. 883-2555 BPS 14400 Fax/Modem, Teleport Gold II, for Macintosh/Power Macintosh computers, new in box. 880-6591

Braumuller piano, \$350. 256-739-9467 Oak computer desk with hutch, best offer. 772-

Motorola cellular flip phone w/outside display, w/battery, belt clip, ac & car charger, \$75. 256-503-

Microsoft Office 2004: Macintosh Professional Edition, includes Virtual PC7, new, unopened in box, \$265. 256-587-6343

Single strand pearls, worn once, have paperwork, \$600, 922-9294

2001 Coleman folding electric-lift camper, 10'x25' setup, a/c, kitchen, toilet, showers, king-size beds, \$9,500. 931-438-2411

Hippo driver, 400cc w/graphite design shaft, \$60; Bang golf driver w/ProForce shaft, \$60. 256-506-3236

Decorative cast iron vent-free thermostatically controlled zero-clearance gas heater, 35k BTU, \$400. 656-2965

Two UT/Kentucky football tickets, Nov. 17, Section Z15, Row 39, seats 17-18, \$38 each. 881-1186

Girl's red wool coat w/black velvet collar, size 14, \$30. 883-5168

Office desk, 24x54, \$60; computer desk, 30x60, \$40.971-0571

Vector jump starter, \$25; 20 ton jacks, \$25; Lawren's stainless potato ricer, \$18, 837-6776

Lawren's stainless potato ricer, \$18.837-6776 Epiphone MM30 mandolin, A-style, \$180.723-4103

Golf cart, completely restored, gas powered, used 3 times since restored, \$1,500.852-8750

Bed frame, head & footboard, 5-drawer chest, 5-drawer dresser w/mirror, chair. 859-1188

Computer, desk, vcr, games, tv, sewing machine, bike, dog crate, more, \$80 for all. 881-5411

Hotpoint electric dryer, works, \$30; Hotpoint washer, needs work, make offer. 829-0776 after 5

Callaway Big Bertha War Birds, 12, 3, 5 and 9, \$400; King Cobra irons, \$200. 337-5825

Natural gas heater, 50k BTU, \$225; Mitsubishi console tv, 27", \$185; Bedroom set, \$350. 256-498-3023

Round garden tub/spa, 4'6" diameter x 15" deep, includes spa pump & wooden decking, \$100. 603-4891

French Provincial furniture: double dresser, chest-of-drawers, desk, \$600 for all; large parrot cage, \$80. 722-8004

Queen Anne oval dining table, leaf, and 4 chairs, \$400.464-0710

1885 antique mission Oak table, 36x29x29, \$150; outdoor warming pad for doghouse, \$45.837-

1774

AKC miniature Schnauzer puppy, shots/dewormed, parents on premises, female, black & silver, \$300. 256-420-8884

Baby crib, wood, mattress, sheets, \$80. 603-1930 Sears Mountain King artificial Christmas tree w/ stand, 7-1/2', detached branches, \$25. 256-859-9165

Pennsylvania House entertainment center, Cherry, holds up to 30" tv, \$750. 931-427-2059

Ranger 2950, MFP noise bridge, Wilson magnetic antenna, PDC 600LP meter, power/SWR meter. 464-5685

Robeson portable kerosene heater, Model 03-2629-91, \$45.722-9989

Kincaid 3-piece entertainment center, solid Cherry, 6'Hx8'W, \$1,200. 828-0756

Hubbell 2-post relay rack, 19", 45U, black finish, \$75. 256-457-1638

Bushnell Yardage Pro 500 DX range finder w/case, \$125.880-7305

Camper shell for LWB 1989 Ranger, stored inside, \$150; Aluminum 4x4 wheels, 15", \$75 set. 256-350-5836

German Shepherd pups, AKC, champion line, born 9/29/94, dewormed, shots, vet checked, \$500. 256-694-5912

Blue leather reclining sofa, \$250. 837-8946 Platinum ring, 3-diamond, \$150; large hardwood tv stand w/drawer, maple color, \$50. 890-0755

Gas log set for regular fireplace, used, \$25. 885-2386

Beagle puppies, 6 wks. old, 3 males, \$60 each. 216-1699

Lance Armstrong LIVESTRONG bracelets, yellow adult size. 256-572-1197

Two solid maple single beds, slats & one box

spring, \$80. 256-232-4168/Athens Four Honda steel wheels and tires, fit 1997

Civic, \$80. 828-3181 Minn-Kota 565 28 lb. thrust foot-control bow

mount trolling motor, steering cable fraying, \$50. 828-5326

Maytag washer & dryer, SE Huntsville, \$150 pair. 508-4379

Meade 8" SCT w/equatorial mount, valuable extras, \$900. 256-882-6686

1979 18ft fishing boat, 115hp Mercury, livewells, depth finder, trolling motor, trailer, \$2250-obo. 426-0223

Vehicles

2002 Nissan Maxima GLE, 21k miles, loaded, 4-month warranty, \$18,600

1986 Honda Fourtrax 350 4x4 4-wheeler, camocover, gunrack, Goodyear 24" tires, \$2,000.

1995 Yamaha 350 4-wheeler, \$1,750. 651-3064 2001 Nissan Frontier, crew cab, 4wd, loaded, 15,500; 1999 Honda XR 100, \$1,000. 256-434-0073

1998 300cc Polaris ATV, auto. transmission w/H, L, & R, front & rear racks, \$1,800. 881-9753

1999 Chevrolet Tahoe LS, 2wd, 67k miles, front & rear a/c, sound system, one-owner, \$13,500.656-

9527

2000 Ford Explorer Sport, burgundy, v6, 5-speed, 2wd, cruise, am/fm/cassette/cd, 67k miles, one-owner, \$8,000. 256-828-9798

2002 Toyota Tacoma, automatic, 4x4, TRD off-road package, short-turn radius, silver, cassette/cd, bedliner, toolbox. 585-0473

 $2004\ Nissan\ Quest\ SE\ w/luggage\ rack\ \&\ dvd$ entertainment system. 858-6004

2002 Mercury Villager Popular, white, 10k miles, 3.3L, 6-cyl., 4-speed, automatic, wheel chairlift, \$12,000. 256-464-0945

1990 Dodge Dynasty, all electric, salvaged title, runs well, \$400. 468-4300

1995 Buick Park Avenue, 96k miles, one-owner, loaded, daily driver, \$4,200. 883-2863

Pocket Rocket mini-bike, 43cc, electric/remote start, gas powered, F/R disk brakes, lights. 714-5343 2001 Ford Explorer, \$7,500. 233-6197

1992 Volvo 960 SW, 171k miles, \$1,975. 256-922-1105

1994 Lexus ES300, emerald green/tan leather, 170k miles, sunroof, garaged, new belts/hoses, \$5,000. 520-3083

1995 Mercedes-Benz C220, black, 4-door, \$8,000. 256-783-4456

1990 Mercury Cougar, AT, all-power, 2nd owner, 70k original miles, \$3,000. 931-993-7768

1996 Dodge van, Prime Time Conversion, Class III hitch, trailer braker, 73k miles, \$6,200. 256-772-9768

1998 Ford Explorer XLT, 4x4, all-power, leather, cruise, keyless entry, cd/cassette, 100K miles. 489-3166

1976 El Camino, small block, \$1,900; 1974 El Camino w/freshly rebuilt big block, \$3,200. 431-7755/8 a.m-8 p.m.

2003 Yamaha V-Star 650 Silverado motorcycle, windshield, saddlebags, garage kept, adult-owned, \$5,975. 350-2782

1990 Toyota Camry, air, moon roof, one-owner, \$2,000. 881-0972

2004 Chevrolet Avalanche, black, 4-door, all-power, tinted glass, loaded, \$21,500. 464-3280

1992 Mercury Sable wagon, GS, blue, all-power, 248k miles, \$400. 430-6842

Wanted

Ride from near Huntsville Hospital, 7 a.m. to 3:30 p.m., will pay \$7 per day. 533-6980

Someone to build cedar banister for a log cabin or advise. 883-2948

Used lawn mower; futon frame; small white or silver computer desk; in good condition. 256-673-0045

Free

White Calico female cat, loving, spayed, approx. 2 yrs. old. 337-4321

Intex above ground pool, 42"x15', w/filter & accessories. 468-4406

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